

SOME TROPICAL AMERICAN PHYCITINAE

(Lepidoptera, Pyralidæ)

By HARRISON G. DYAR

Mr. Wm. Schaus requested me to determine the Phycitinae recently collected by himself and Mr. J. Barnes in Guatemala. Among the new species found, I mention here also other species that have been in the collection awaiting names.

Myelois palpalis, new species.

Fore wing whitish gray, indistinctly suffused with dull reddish on the lower half and at base; lines indistinct, the inner forming a black dentate spot on cell; discal spots small, diffused; outer line pale, defined by streaks on the veins before and after. Hind wing whitish, translucent, gray on the costa, veins and terminal line. Expanse, 17 mm.

Type, male, No. 21929, U. S. Nat. Mus.; Cayuga, Guatemala, April (Schaus & Barnes).

Similar to *M. venipars* Dyar, but the palpi have the third joint about as long as the second instead of much shorter.

Fundella cistipennis Dyar.

Ballovia cistipennis Dyar, Proc. U. S. Nat. Mus., xliv, 323, 1913.

Ballovia does not constitute a distinct genus from *Fundella*.

Fundella eucasis, new species.

Fore wing light gray, the basal space filled in with blackish; lines very indistinct, whitish, the inner oblique; discal marks only a trace. Hind wing white, translucent, the inner area yellowish brown. Expanse, 14 mm.

Type, male, No. 21930, U. S. Nat. Mus.; Caracas, Venezuela (Raymono).

Fundella argentina, new species.

Fore wing light gray, thickly irrorated with blackish, especially on outer margin; inner line blackish, oblique, broad, narrowing below median vein, whitish edged without; discal dots blackish, somewhat diffused; outer line whitish, slightly ex-

curved mesially, preceded by dark points on the veins; a diffused marginal black line. Hind wing white, translucent, the inner area sordid yellowish. Expanse, 18 mm.

Type, male, No. 21931, U. S. Nat. Mus.; Tucuman, Argentina, March, 1905 (E. Dinelli).

✓ **Rhodophaea extrincica**, new species.

Fore wing blackish gray, the lines faint, whitish; inner line near middle of wing, the outer near the margin, coarsely waved; two black spots in the cell at inner line and two at end of cell; small blackish terminal dots. Hind wing white, translucent, gray on costa and termen. Expanse, 13 mm.

Type, male, No. 21932, U. S. Nat. Mus.; Santiago, Cuba, October, 1902 (W. Schaus).

There are also five males and two females from the same place. On the hind wings, vein 4 is very indistinct in the male, being almost coincident with 5; it is more distinct in the female.

✓ **Hypsipyla grandella** Zeller.

Nephopteryx grandella Zeller, Isis, 1848, p. 881.

Hypsipyla cnabella Dyar, Proc. U. S. Nat. Mus., xlvii, 405, 1914.

The specimens of *cnabella* are smaller, but I do not now think that any specific difference exists.

✓ **Hypsipyla denticosella** Dyar.

Sematoneura denticosella Dyar, Proc. U. S. Nat. Mus., xlii, 105, 1912.

The species will find a better place in the genus *Hypsipyla* Ragonot.

✓ **Acromeseres**, new genus.

Hind wings with 8 veins; median nervure "bifid"; labial palpi upturned, reaching the middle of the front; vein 2 of hind wing arising before the end of the cell, which is moderately short, veins 3 and 5 appearing stalked; male antennæ simple; maxillary palpi dilated with scales; vein 8 of hind wing distinct; fore wing with veins 4 and 5 approximate at base, but separate; front of head smoothly scaled; on fore wing

vein 5 not in line with the median, 10 separate from the stalk of 8-9, a raised line of scales on basal third.

✓ **Acromeseres dialithus**, new species.

Fore wing light gray, irrorated with blackish; at basal third a band of black raised scales, from cell to inner margin, slightly oblique and followed by a broad orange-red area; discal dots small, black, separate; outer line faint, pale, wavy, edged with black within. Hind wing whitish translucent, gray on costa, ends of veins and outer margin. Expanse, 14 mm.

Type, male, No. 21933, U. S. Nat. Mus.; Santiago, Cuba, October, 1902 (W. Schaus). Also two males and five females from the same place.

✓ **Hemiptilocera jocarella** Schaus.

Acrobasis jocarella Schaus, Ann. Mag. Nat. Hist. (8), xi, 245, 1913.

No male is at hand, so that any generic placing must be uncertain; still the species looks so much out of place in *Acrobasis* that I have ventured to move it next to what certainly seem to be its allies.

✓ **Megarhtria cervicalis**, new species.

Fore wing white on costal half, shading to dark gray on inner area, this color reaching costa at base and apex; a broad red-brown at base on costa and another at middle of cell, both oblique; a costal spot above the small discal dots; an oblique band in reverse direction from apex, crossing the small pale denticulate subterminal line; hind wing gray, translucent. In the neck behind the head are some very large flat white scales. The abdomen of the male is long and beneath before the claspers are curious curved white structures instead of tufts

Type, male, No. 21934, U. S. Nat. Mus.; Tanamo, Cuba, August, 1901 (W. Schaus).

✓ **Cerocanthia subcaudata**, new species.

Fore wing light yellowish gray, irrorated with purplish; lines black, slender, the inner near the middle of the wing, the outer submarginal; discal dot yellowish; dark streaks on the

discal venules; a dark terminal line. Hind wing yellowish gray, ocherous on the inner area and especially the produced anal angle. Anal tuft of male voluminous, black below, ocherous at base above. Expanse, 16 mm.

Type, male, No. 21935, U. S. Nat. Mus.; Cayuga, Guatemala, May (Schaus & Barnes).

Markings much as in *Ulophora subsutella* Schaus, but the shape of the hind wing is entirely different.

✓ ***Pinipestis horneana*, new species.**

ic! Fore wing light violet-gray, marked with red-brown; costa red to inner line; a median streak; inner line pale, waved, bordered broadly within with red and outwardly narrowly with brown; costa broadly red mesially, continued narrowly to inner margin and enclosing a pale, raised discal mark; raised scales also before inner line and in median space; outer line broad, pale, broadly bordered without by red; termen narrowly blackish; fringe interlined. Hind wing faintly yellowish gray, veins and termen slightly darker. Expanse, 28 mm.

Type, male, No. 21936, U. S. Nat. Mus.; Santiago de las Vegas, Cuba, bred from larvæ on pine (W. T. Horne). (5.0)

✓ ***Dioryctria sysstratiotes*, new species.**

Fore wing light gray, irrorated with blackish; a black patch in basal space before inner line not attaining costa; lines black, the inner strongly angularly dentate, the outer excurved at vein 5 and denticulate below; discal dot pale; a brown patch below it; a brown area beyond outer line before termen; a terminal black line, finely cut. Hind wing translucent grayish; costa and termen gray; fringe interlined. Expanse, 26 mm.

Type, female, No. 21937, U. S. Nat. Mus.; Cayuga, Guatemala, June (Schaus & Barnes). Also two other females, one with the same data, the other, Perulha, Guatemala, July (Schaus & Barnes).

✓ ***Dioryctria majorella*, new species.**

Much as in the preceding, larger, more diffused; discal mark narrower, more oblique; outer line less angled, evenly dentate

from vein 5 to inner margin; inner line broader and not sharply defined. Expanse, 33 mm.

Type, female, No. 21938, U. S. Nat. Mus.; Jalapa, Mexico (Schaus collection).

✓ **Dioryctria drucei**, new species.

Fore wing dark gray; a diffused blackish area near base; a dull orange patch on basal third of inner margin, preceded by a black half-line and followed by the strongly oblique inner line, which widens into a triangular shade on costa; discal mark narrow, blackish, continued by a macular black shade to inner margin; outer line incurved above, oblique, scarcely denticulate, followed by a light line and a faint dark duplication; a terminal black line; fringe interlined. Hind wing sordid yellowish gray, darker on costa and termen. Expanse, 28 mm.

Type, female, No. 21939, U. S. Nat. Mus.; Rinconada, State of Vera Cruz, Mexico (Schaus collection).

The specimen bears a label in Druce's writing, "*Dioryctria simmermanni* Grote," and is obviously the specimen so recorded in *Biologia Centrali Americana*, Lep. Het., ii, 564, 1899.

Discopalpia ragonoti, new species.

Ragonot founded his genus *Discopalpia* on specimens from Guatemala which he had wrongly identified as *Myelois flavicans* Zeller from Colombia. The species is now before me, possessing the peculiar male palpi described by Ragonot. The markings of the wings are in no wise different from those of *flavicans*, so that the misidentification is very pardonable. The size also is the same.

Type, male, No. 21940, U. S. Nat. Mus.; Cayuga, Guatemala, May (Schaus & Barnes).

✓ **Piesmopoda flavicans** Zeller.

Myelois flavicans Zeller, Hor. Ent. Soc. Ross., xvi, 193, 1881.

Piesmopoda xanthopolys Dyar, Proc. U. S. Nat. Mus., xlvii, 332, 1914.

Zeller described from females only. Judging by localities solely, it is more probable that my *xanthopolys* (Panama) is

flavicans (Colombia), than that *flavicans* is the Guiana species with which I formerly identified it. The latter is described below as new. The male *xanthopolys* has the palpi very long and slender, obliquely upcurved and much exceeding the vertex.

✓ ***Piesmopoda fratella*, new species.**

Male palpi small, rather thickly scaled, not reaching the vertex of head. Coloration and size as in *flavicans* Zell.

Type, male, No. 21941, U. S. Nat. Mus.; St. Jean, Maroni River, French Guiana, March, 1904 (W. Schaus).

✓ ***Aphycitopsis*, new genus.**

Hind wings with eight veins, the median nervure "bifid"; palpi upturned, not reaching the vertex, vein 2 arising before the angle of the cell, which is very short; maxillary palpi of male filiform, the antennæ simple, minutely ciliate.

✓ ***Aphycitopsis isabella*, new species.**

Larger and longer-winged than *P. flavicans* Zell., but with the same pattern of coloration. The purple color is less extended at the anal angle, the yellow color running out there. Expanse, 18 mm.

Type, male, No. 21942, U. S. Nat. Mus.; Juan Vinas, Costa Rica, January (Schaus & Barnes).

✓ ***Piesmopoda xanthozona*, new species.**

Male antennæ with a notch at the base, formed by the angle of the basal joint from which the shaft arises opposed to the three basal joints of the shaft, which are hollowed, the third joint bearing an angle. Coloration as in *P. xanthomera* Dyar, in which, however, the male antennæ are simple and unmodified. Expanse, 15 mm. WLD

Type, male, No. 21943, U. S. Nat. Mus.; St. Jean, Maroni River, French Guiana, April, 1904 (Schaus & Barnes).

✓ ***Piesmopoda apocerastes*, new species.**

Male antennæ with a notch at the base, the basal joint straight and long, the notch involving the basal eight joints of

the shaft and slightly scaled with brown on the inner side. Markings as in *P. xanthoudemia* Dyar, but with rather more pronounced patches of red scales along the costa. Expanse, 13 mm.

Type, male, No. 21944, U. S. Nat. Mus.; Juan Vinas, Costa Rica, November (Schaus & Barnes).

The specimen is labeled "*P. semirufella* Zell.," which may be correct; but I detect no trace of the pale inner line shown in Zeller's figure. Zeller described from two females, which were not identical, and the exact application of his name may not be cleared up for some time.

Zamagiria laidion Zeller.

Myelois laidion Zeller, Hor. Ent. Soc. Ross., xvi, 211, 1881.

Ragonot places this in *Piesmopoda*, having no male. Sir George Hampson saw a male taken at Miami, Florida, by Mr. Wm. Schaus and labeled it *Elasmopalpus*. The present genus, however, seems preferable.

Zamagiria masculinus, new species.

Fore wing light gray, a patch of dull reddish scales between the raised scales and inner line and in lower part of median space; raised scales at basal third, mixed with some black ones; inner line black, dotted, angled inward on vein 1; discal dots distinct, black, the lower elongate; outer line whitish, obscure, incised on disk, preceded by black markings on the veins; a row of terminal dashes. Hind wing whitish with grayish veins and terminal line. Expanse, 25 mm.

Type, male, No. 21945, U. S. Nat. Mus.; Cayuga, Guatemala, April (Schaus & Barnes).

Zamagiria deia, new species.

Fore wing gray, darkly shaded along the costa; distinct red-brown shades in a streak in base, between raised scales and inner line and below discal venules; a black line at raised scales, not attaining costa; inner line about middle of wing, black, oblique, dotted, bent at right angles below median vein; discal dots black, the lower elongate; veins outwardly streaked

with black, a row of dots defining the pale outer line which is incised on discal fold. Expanse, 21 mm.

Type, male, No. 21946, U. S. Nat. Mus.; Chejel, Guatemala, June (Schaus & Barnes).

✓ **Zamagiria ipsetona**, new species.

At first sight seeming the female of the preceding. There is, however, very little red-brown on the wing; the raised scales, while accompanied by black scales, do not form a line; the inner line is not angled, but runs, dotted above and waved below, straight across the wing; streaks on median nervules more pronounced, and lower discal dot elongate, elliptical. Expanse, 24 mm.

Type, female, No. 21947, U. S. Nat. Mus.; Juan Vinas, Costa Rica, June (Schaus & Barnes).

✓ **Zamagiria striella**, new species.

Fore wing light gray, darker along the costa and terminally; a black streak along vein 1 from base to raised scales, where it widens out; a reddish area below median vein, followed by the inner line, which is blackish, faint, angled outward on submedian fold; discal dots small, separated; black streaks at bases of veins 2 and 3; some blackish scales in lower part of median space; outer line whitish, incised subcostally, edged within by black which is dotted on the veins; a row of terminal black dashes. Hind wing whitish, gray at apex and terminal line. Expanse, 21 mm. The tuft on the maxillary palpi is yellowish white.

Type, male, No. 21948, U. S. Nat. Mus.; Chejel, Guatemala, August (Schaus & Barnes).

✓ **Zamagiria pogerythrus**, new species.

Fore wing light gray, darker along the costa; raised scales with black and red scales, followed by a patch of reddish scales centrally; inner line broken in cell, dotted on median and vein 1, black, a little angled outward; discal dots black, the lower one elongated and elliptical; veins black-lined outwardly, broken by the whitish outer line, which is indented subcostally;

a row of terminal black dots. Hind wing whitish translucent, gray along the costal edge and terminal line. Expanse, 21 mm. The tuft on the maxillary palpi is bright red.

Type, male, No. 21949, U. S. Nat. Mus.; Chejel, Guatemala, August (Schaus & Barnes).

✓ **Zamagiria hospitabilis**, new species.

Fore wing shaded with black so that the pale gray ground appears only in the raised scales and in a spot in lower half of median space; a dull reddish space between raised scales and inner line, which is whitish within, black without, not attaining costa; discal dots black conjoined; veins black-lined, reddish between; outer line whitish, incised above. Hind wing translucent, gray on costa, veins outwardly and termen. Expanse, 21 mm. The anal tuft of the male is dull ocher; that on maxillary palpi bright red.

Type, male, No. 21950, U. S. Nat. Mus.; Tanamo, Cuba, November, 1901 (W. Schaus).

Anegecephalesis catheretes Dyar.

Anegecephalesis catheretes Dyar, Ins. Ins. Menstr., v, 46, 1917.

This species looks much like a *Zamagiria* and is probably closely allied; but the maxillary palpi of the male bear a dense plate of scales instead of hairs. I bred this species also in 1898, but the specimens were mislaid. The food plant is *Dipholis salicifolia* as determined for me at the time by the late Mr. F. Kinzel.

✓ **Hyalospila burdettella** Schaus.

Piesmopoda burdettella Schaus, Ann. Mag. Nat. Hist. (8), xi, 249, 1913.

Discopalpia semproniella Schaus, Ann. Mag. Nat. Hist. (8), xi, 249, 1913.

The types are both males and the same species, one being fresh, the other worn. The species seems best placed in *Hyalospila*.

✓ **Hyalospila clevelandella** Dyar.

Oryctometopia clevelandella Dyar, Proc. U. S. Nat. Mus., xlvii, 331, 1914.

The species may be removed to *Hyalospila*.

✓ *Hyalospila ptychis*, new species.

Fore wing gray at base of costa, white over the cell, the inner half and terminal area shaded with reddish violet; inner line lost; a black point in the submedian fold; discal dots black, separate, round; outer line slender, reddish, waved, incised and broken in submedian fold; a terminal row of minute black dots. Hind wing translucent, veins and termen gray. Expanse, 14 mm.

Type, male, No. 21951, U. S. Nat. Mus.; Santiago, Cuba, June (W. Schaus).

✓ *Homalopalpia columnella* Zeller.

Myelois columnella Zeller, Hor. Ent. Soc. Ross., xvi, 209, 1881.

Ragonot places this in *Piesmopoda*, having no male. The male has the same sexual characters as *H. dalera* Dyar, and I am not certain that the species are distinct. *H. columnella* seems somewhat larger.

Homalopalpia paranensis, new species.

Male as in *H. columnella* and *dalera*, but the basal joint of the antennæ is brown instead of pale buff and has a smaller, less conspicuous notch. Fore wing with the base dark brown, the following pale band with a sharp curved yellowish edge, much as in the following species; outer line finely denticulate, also as in the following; the palpi, however, are broadly thickened with dark brown hairs as in *columnella*.

Type, male, No. 21952, U. S. Nat. Mus.; Castro, Parana, Brazil (Schaus collection).

✓ *Homalopalpia nerthella* Schaus.

Piesmopoda nerthella Schaus, Ann. Mag. Nat. Hist. (8), xi, 247, 1913.

Homalopalpia euthales Dyar, Proc. U. S. Nat. Mus., xlvii, 403, 1914.

The type of *nerthella* is a female, of *euthales*, a male, seeming at first sight quite distinct. I am satisfied that the differences are only sexual.

✓ **Eucardinia caricæ** Dyar.

Ulophora caricæ Dyar, Proc. Ent. Soc. Wash., xiv, 218, 1913.

Eucardinia caricæ Dyar, Ins. Ins. Menstr., vi, 139, 1918.

✓ The same peculiar sexual differences exist here as in *Homalopalpia*, although in less degree. The two genera should be associated.

✓ **Cuba**, new genus.

Hind wing with 8 veins, the median "bifid," vein 2 before the angle of the cell, which is very short, 3 and 5 not appearing stalked; labial palpi upturned, reaching above vertex, the maxillary palpi very slightly dilated with scales; vein 10 of fore wing from the cell; antennæ of male simple; no frontal tuft.

✓ **Cuba furculella**, new species.

Fore wing violaceous gray; a band at base on costa and inner line luteous brown, oblique, straight, parallel; a line in reverse direction touching the inner line on inner margin and running to apex; discal dots distinct, separate; outer line obscurely denticulate, pale, mesially a little outcurved, defined by dark dots on the veins; a terminal row of black dashes. Hind wing whitish, translucent, gray on the costa, upper veins and outer edge, the fringe slightly yellowish. Expanse, 15 mm.

Type, male, No. 21953, U. S. Nat. Mus.; Santiago, Cuba, December, 1902 (W. Schaus). The male has a trace of dark brown on the discal fold near base of fore wing. The uncus ends in two large hooks.

✓ **Procandiope**, new genus.

Hind wings with 8 veins, the median "bifid"; vein 3 from the angle of the cell; male antennæ with a groove at the base of the shaft bearing a tooth on one side but no tuft; maxillary palpi filiform; veins 4 and 5 of fore wing separate; 5 not in line with the median; 10 from the cell; front smooth; labial palpi slender, upturned, the third joint long and slender but not as long as the second.

Procandiope mamella, new species.

Fore wing yellowish white along the costa, the rest thickly overlaid with purplish scales; inner line near middle of wing; sharply toothed outward in cell, blackish, waved and fainter below; discal dots approximate, angular; outer line excurved below middle, pale, smooth, bordered within by blackish, which forms a patch in the outcurve of line; a row of terminal black dots. Hind wing gray, translucent over the disk, costal veins and termen darker. \bar{E} xpanse, 15 mm.

Type, female, No. 21954, U. S. Nat. Mus.; Trinidad River, Panama, March 2, 1912 (A. Busck).

Also a (male) and a female, Cayuga, Guatemala, May (Schaus = 2 ♀ & Barnes).

Nephoptyx bisra, new species.

Fore wing light gray, shaded with black at base; a broad inner black band, limited by a straight whitish line within and without, the two a little divergent on costa; a narrow black shade beyond; discal mark lunate, black; a faint oblique irregular line across median space, running inward and limiting a whitish patch on the inner margin; outer line smooth whitish, excurved on middle third, edged by a blackish line within and more faintly without; a terminal black line. Hind wing light gray, veins and terminal line darker; fringe interlined. \bar{E} xpanse, 21 mm.

Type, female, No. 21955, U. S. Nat. Mus.; Orizaba, Mexico (Schaus collection).

Anadelosemia, new genus.

Hind wing with 8 veins, the median nervure "bifid," vein 2 at the angle of the cell; veins 4 and 5 of fore wing separate, 5 not in line with the median; vein 10 from the cell; front smooth; labial palpi slender, upturned, the third joint about as long as the second; maxillary palpi slightly dilated with scales; male antennæ simple, minutely serrulate-pubescent.

Type, the following species:

✓ **Anadelosmia senesciella** Schaus.

Nephoptyx senesciella Schaus, Ann. Mag. Nat. Hist. (8), xi.
251, 1913.

✓ **Anadelosemia tecmessella** Schaus.

Ceracanthia tecmessella Schaus, Ann. Mag. Nat. Hist. (8), xi.
251, 1913.

✓ **Anadelosemia fifria**, new species.

Fore wing light gray; a black speck at base; inner line whitish, curved, edged with black without above and within below; discal spots small, narrowly separate; an oblique blackish irregular line from before apex to middle of inner margin, stained with red on discal fold; outer line blackish, faint, lost in a black cloud at apex, bordered macularly within by blackish; a terminal row of subconfluent dots. Hind wing translucent grayish, costa, veins and terminal line darker. Expanse, 15 mm.

Type, female, No. 21956, U. S. Nat. Mus.; Cayuga, Guatemala, May (Schaus & Barnes).

✓ **Anadelosemia base**, new species.

Fore wing light gray, marked much as in the foregoing species, the black mark at base large and obliquely terminated; discal spots blackish, but the oblique line and the edges of the outer line are brownish; terminal dots blackish. Expanse, 15 mm.

Type, female, No. 21957, U. S. Nat. Mus.; Cayuga, Guatemala, May (Schaus & Barnes).

Tlascalá infinitella, new species.

Fore wing dark gray-brown; a raised line of white and black scales at basal third, perpendicular to costa; discal mark a trace of raised scales; outer line faint, whitish, traceable only below vein 5; a terminal black line. Hind wing yellowish gray, pale, shading to brownish gray on the margin. Expanse, 27 mm.

Type, female, No. 21958, U. S. Nat. Mus.; Orizaba, Mexico (Schaus collection).

Elasmopalpus puer, new species.

Fore wing dark gray, uniform; a small blackish discal dot; no other marks visible. Hind wing translucent whitish, gray along costa, veins and termen. Expanse, 16 mm.

Type, male, No. 21959, U. S. Nat. Mus.; Santiago, Cuba, February, 1902 (W. Schaus).

Ancylostomia euchroma, new species.

Fore wing ochreous, whitish lined between the veins in the cell, the costa dark ochre; apex slightly orange; area below the cell broadly red to end of cell, succeeded by purple to tornus, the purple obliquely limited inwardly; a single discal dot (lower); three dots on veins 2, 3, and 4 in oblique row; vein 1 interruptedly black-lined; no terminal dots. Hind wings whitish translucent, the terminal area gray-shaded in the female. Expanse, 25 mm.

Type, female, No. 21960, U. S. Nat. Mus.; Castro, Parana, Brazil (Schaus collection). Also a male with the same data.

Ancylostomia lithosella Ragonot.

Selagia lithosella Ragonot, No. Am. Phyc., 9, 1887.

Honora luteella Hulst, Journ. N. Y. Ent. Soc., viii, 223, 1901

Described from Arizona, but extends also south on the Mexican table land as far as Mexico City.

Pseudodivona cispha, new species.

Fore wing light gray, whitish on costal half; base reddish shaded, becoming black on costa; lines black, dotted, the inner cutting the red shade on inner margin by a white dash; discal venules black-lined, dotted before the pale outer line; discal dots small; a black wedge-shaped mark on costa at apex; a row of terminal black dots. Hind wing whitish translucent, the veins and terminal line gray. Expanse, 18 mm.

Type, male, No. 21961, U. S. Nat. Mus.; Volcan Santa Maria, Guatemala, October (Schaus & Barnes).

Also two males and a female from Guatemala and a damaged male from Costa Rica (Tuis, May).

✓ ***Pseudodivona carabayella***, new species.

Fore wing white, the inner area shaded with purplish red except at inner line where the white reaches inner margin; a black area on costa at base, followed by a dash in cell; costal edge black to end of cell; inner line black, angled. Obsolete below submedian fold; lower discal dot running onto the veins, the two obliquely placed and subconfluent; outer line forming an oblique dash to cell, suddenly projected outward and forming dots on the veins, obsolete below; subterminal line black above, whitish below, running faintly through the purple area, veins 2, 3 and 4 black-lined beyond; a terminal black line, cut on the veins. Hind wing whitish translucent, upper veins, costa and terminal line gray. Expanse, 27 mm.

Type, male, No. 21962, U. S. Nat. Mus.; Oconeque, Carabaya, Peru (Schaus collection).

Also three males from the same place, two of them being smaller (23 mm).

✓ ***Pseudodivona santa-maria***, new species.

Fore wing white on costal half beyond inner line, the base and inner area purplish; inner line white, crossing wing, with two sharp outward teeth centrally; upper discal dot small, lower elongate; outer line incised on discal fold, whitish, black-edged within, blackish on the veins below both before and after outer line; a row of terminal black dots. Hind wing grayish translucent, the veins, costa and terminal line darker. Expanse, 20 mm.

Type, female, No. 21963, U. S. Nat. Mus.; Volcan Santa Maria, Guatemala, July (Schaus & Barnes).

Also another female, Cayuga, Guatemala, May (Schaus & Barnes).

✓ ***Moerbes dryopella*** Schaus.

Zophodia dryopella Schaus, Ann Mag. Nat. Hist. (8), xi, 249, 1913.

Moerbes dryopella Dyar, Proc. U. S. Nat. Mus., xlvii, 337, 1914.

This species is interesting from looking exactly like a *Pseu-*

dodivona in coloration, but having markedly different venation in the hind wing, vein 4 being absent.

✓ ***Olyca nephelepasa*, new species.**

Similar to *O. pectinatella* Hampson, but entirely shaded with dark gray, only a little irroration of white at apex; discal dot black, at base of vein 4-5; outer line a trace, blackish, angled inward at vein 4; terminal dots diffused, faint. Hind wing whitish, apex grayish. Expanse, 43 mm.

Type, male, No. 21964, U. S. Nat. Mus.; Tehuacan, Mexico, September, 1910 (R. Müller).

✓ ***Olyca asthenosoma*, new species.**

Slender, the body long, the wings narrow; fore wing whitish, yellowish along the inner third; inner line whitish, edged with black on both sides, a sharp outward tooth on median vein and on submedian fold; a black oblique dash in median space from inner margin to origin of vein 2; outer line denticulate, incurved below vein 2, pale, edged with black dots on both sides; a terminal row of black dots. Hind wing transparent, the veins, costa and termen grayish. Expanse, 30 mm.

Type, male, No. 21965, U. S. Nat. Mus.; 60 miles up the Maroni River, French Guiana, August, 1904 (W. Schaus).

✓ ***Ozamia clarefacta*, new species.**

Fore wing whitish, the inner area shaded irregularly with rufous; a black patch close to base; inner line forming an oblique black bar from costa to submedian fold, then slender and incurved to inner margin; discal dots conjoined, lunate; two dots beyond and irregular scales on vein 1 below; outer line double, black, incised on discal fold, denticulate; a row of terminal black dots. Hind wing whitish, translucent, apex, vein 6 and terminal line gray. Expanse, 25 mm.

Type, female, No. 21966, U. S. Nat. Mus.; Orizaba, Mexico, April, 1910 (R. Müller).

Also a male and three females from Orizaba and Jalapa (Schaus collection).

The species occurs in Texas, having been confounded with the insular *O. lucidalis* Walker, which is a darker and diffusely marked insect.

✓ ***Euzophera ticitoa*, new species.**

Fore wing brownish gray, shading to reddish on inner area; faint blackish longitudinal shading; inner line curved, pale, shaded with blackish beyond along costa; discal dots conjoined, linear; outer line pale, shaded with blackish before and after, incised on discal fold and shortly excurved below; terminal dots diffused. Hind wing translucent gray, brown on margin and fringe. Expanse, 19 mm.

Type, female, No. 21967, U. S. Nat. Mus.; Volcan Santa Maria, Guatemala, October (Schaus & Barnes).

Also a male from the same locality.

✓ ***Euzophera came*, new species.**

Fore wing rather dark gray; inner line oblique, whitish, distinct, edged without with blackish, slightly toothed on submedian fold; discal dots blackish, not contrasted; outer line whitish, edged with blackish within, the middle third slightly produced and denticulate, incised on submedian fold; terminal dots black, subconfluent. Hind wing pale gray, nearly hyaline between the veins, median and vein 6 streaked with dark gray; costa and termen darker than the disk. Expanse, 15 mm.

Type, female, No. 21968, U. S. Nat. Mus.; Cayuga, Guatemala, June (Schaus & Barnes).

Also five other females from the same place.

✓ ***Euzophera laura*, new species.**

Fore wing dark purple, the costal area white; inner line oblique, black, crossing the white area and obsolete below; discal dots separate; outer line white, pulverulent, even; some white powdering in terminal space; terminal dots black, small. Hind wing brownish gray, translucent on the disk between the veins. Expanse, 20 mm.

Type, female, No. 21969, U. S. Nat. Mus.; Cayuga, Guatemala, July (Schaus & Barnes).

Also a male in poor condition, from the same place.

✓ **Euzophera gais**, new species.

Fore wing brown, coarsely powdered with black; inner line beyond the origin of vein 2, whitish, straight, oblique, obsolete on the costal half; discal mark a black dash; veins 2-6 black lined; outer line whitish, straight, parallel to the margin; terminal dots small. Hind wing gray, translucent between the veins. Expanse, 14 mm.

Type, female, No. 21970, U. S. Nat. Mus.; Cayuga, Guatemala, June (Schaus & Barnes).

✓ **Euzophera perangusta**, new species.

Fore wing long and narrow; dark gray, thickly irrorate with blackish, a little dark red on inner margin at base, costa and submedian fold in median space; inner line whitish, angled on submedian fold; discal dots black, confluent; outer line whitish, dentate, parallel to the outer margin and therefore distinctly oblique; terminal dots black. Hind wing whitish translucent, gray at apex and narrow terminal line. Expanse, 25 mm.

Type, male, No. 21971, U. S. Nat. Mus.; Montserrat, Trinidad, British West Indies (Schaus collection).

✓ **Euzophera glabrella**, new species.

Fore wing gray-brown, dark and obscure; some blackish shading at base; inner line whitish, obscure, apparently produced on submedian fold; discal dots black, separate; outer line whitish, obscure, denticulate, parallel to the margin; some whitish powdering in terminal space; terminal dots black. Hind wing gray, translucent on the disk between the veins. Expanse, 16 mm.

Type, female, No. 21972, U. S. Nat. Mus.; Cayuga, Guatemala, April (Schaus & Barnes).

Also two males and two females from the same place.

✓ **Entmemacornis**, new genus.

Venation of *Euzophera*; male antennæ with a notch at the

base involving three joints, without tooth or conspicuous scales.

✓ **Entmemacornis proselytes**, new species.

Fore wing dark gray-brown, reddish brown and sordid white scales intermixed; base reddish, with a dark mark below median vein; inner line broad, pale, cut by a narrow dark center and followed by a broad dark area; discal dots small, black, separated; discal area somewhat translucent between the veins; black streaks on veins 5 and 6; outer line pale, incurved above, with preceding and following black dots; terminal dots blackish, illy defined. Hind wing translucent grayish, a little darker in the female than in the male, veins and termen not translucent. Expanse, 16 mm.

Type, female, No. 21973, U. S. Nat. Mus.; Cayuga, Guatemala, April (Schaus & Barnes).

Also two males and a female from the same place.

✓ **Cacozophera**, new genus.

Venation of *Anthropteryx* Dyar; wings long and narrow, trigonate, the apex pointed, not short and square.

✓ **Cacozophera venosa**, new species.

Fore wing brown, powdery, translucent between the discal nervules in a certain light; median vein and branches black-lined; yellowish white powdering along inner margin and terminally; inner line lost; outer line pale, parallel to outer margin, cutting the black veins; terminal dots large, intravenular. Hind wing gray, translucent, veins, costa and terminal line darker. Expanse, 19 mm.

Type, female, No. 21974, U. S. Nat. Mus.; Cayuga, Guatemala, May (Schaus & Barnes).

✓ **Relmis yddiopsis**, new species.

Fore wing gray; a red streak along submedian fold; a blackish shade at base; inner line pale, straight, followed by a very broad dark area; discal dots confluent; outer line pale, incised on discal and submedian folds, preceded by a broad dark area,

which is streaked on the veins and reaches discal mark; terminal dots blackish. Hind wing dark gray, translucent between the veins. Expanse, 20 mm.

Type, male, No. 21975, U. S. Nat. Mus.; Tanamo, Cuba, March, 1902 (W. Schaus).

Also another male from the same place.

Bema fritilla, new species.

As in *B. myja* Dyar as far as can be distinguished in the rubbed specimens. The species is, however, of half the size, and in the male there is a patch of white scales dorsally preceding the anal tuft; in *myja* the white scales are laterally in the incisure. Expanse, 11 mm.

Type, male, No. 21976, U. S. Nat. Mus.; Cayuga, Guatemala, June (Schaus & Barnes).

Also a female from the same locality.

Bema convergens, new species.

Fore wing light yellowish gray, only traces of discal and terminal dots showing, as the specimens are rubbed. Hind wing translucent, veins and termen gray. Expanse, 15 mm. The male has no black or white scales preceding the anal tuft, which is concolorous with the abdomen.

Type, male, No. 21977, U. S. Nat. Mus.; Cayuga, Guatemala, May (Schaus & Barnes).

Also a female from the same locality.

Mescinia bacerella, new species.

Fore wing blackish gray, the costal edge white with red stains; inner line obsolete, indicated by black points; a white line on median vein; discal dots elongate, separate; outer line slender, whitish, an inner blackish edging more distinct than the line; terminal area paler and reddish; a terminal black line. Hind wing translucent, gray on costal veins, terminal line and fringe. Expanse, 12 mm.

Type, male, No. 21978, U. S. Nat. Mus.; Havana, Cuba (C. F. Baker).

Mescinia pandessa, new species.

Fore wing light gray, white along the costa; a black streak along costa at base, a broken one along vein 1 and a narrow one on submedian fold; inner line represented by two dots; discal dots separate; outer line whitish, obsolescent, its inner edge black, straight, not quite attaining costa, but followed by a short apical outer segment which does attain costal edge; terminal line black, not quite reaching apex. Hind wing translucent, costa, veins and terminal line gray. Expanse, 13 mm.

Type, male, No. 21979, U. S. Nat. Mus.; Cayuga, Guatemala, April (Schaus & Barnes).

Also four males from the same place.

Mescinia imperfecta, new species.

Fore wing dark gray, scarcely lighter on costa; some black scales on base of costa and inner margin and along submedian fold; discal dots conjoined, large, round, single; outer line whitish, straight, without dark edges. Hind wing translucent gray, veins and termen darker. Expanse, 14 mm. The specimen is not in fresh condition.

Type, female, No. 21980, U. S. Nat. Mus.; Cayuga, Guatemala, April (Schaus & Barnes).

Strephomescinia, new genus.

As in *Mescinia*, but veins 4 and 5 of fore wing united.

Strephomescinia schausella, new species.

Fore wing whitish gray, sparsely strewn with black atoms; the irrorations form a band below submedian fold outwardly; discal dots elongate, separate; a thick terminal black line. Hind wing whitish translucent, veins, costa and termen gray. Expanse, 9.5 mm.

Type, male, No. 21981, U. S. Nat. Mus.; Santiago, Cuba, June, 1902 (W. Schaus).

Eucampyla oconequensis, new species.

Fore wing dark gray, the white scales predominating on costa toward bases; lines obsolete, the inner indicated by a

broad, slightly paler area, margined faintly without with blackish; lower discal dot present, blackish; no outer line, no terminal dots. Hind wing translucent pale gray, darker on costa and margin. Expanse, 21 mm.

Type, female, No. 21982, U. S. Nat. Mus.; Oconeque, Carabaya, Peru (Schaus collection).

Campyloplexis, new genus.

Hind wing with 7 veins, vein 2 from long before the angle of the cell; 3 and 5 stalked; cell short; labial palpi porrect; cylindrical, smooth; veins 3, 4, and 5 of fore wing stalked.

Campyloplexis inveterella, new species.

Fore wing whitish gray, a dark gray shade along inner margin, narrowing to tornus; costal edge clear, the veins otherwise irrorated with dark, intensified on the discal cross-vein and on the venules outwardly in the usual position of outer line; termen darkly shaded. Hind wing translucent, the veins, costa and margin gray. Expanse, 14.5 mm.

Type, male, No. 21983, U. S. Nat. Mus.; Cayuga, Guatemala, June (Schaus & Barnes).

Also another male from the same locality.

Vitula macropasa, new species.

Fore wing long and narrow, dark gray; lines diffused, whitish, the inner broad and followed by a blackish shade, the outer oblique, exerted slightly on its middle third, preceded by black streaks on the veins; black streaks also in terminal space, the terminal dots small; discal dots elongate, separate. Hind wing whitish translucent, gray on veins, costa and outer margin. Expanse, 21 mm.

Type, female, No. 21984, U. S. Nat. Mus.; Purulha, Guatemala, July (Schaus & Barnes).

Also five males and eleven females from the same place, Chejel and Volcan Santa Maria.

Drescomopsis, new genus.

Hind wing with 7 veins, 2 arising from the angle of the cell

or shortly beyond, 3 and 5 stalked; fore wing with 2 to 5 near end of cell, separate, 4 and 5 not in line with the median; palpi upturned; front smooth.

✓ *Drescomposis subelisa*, new species.

Fore wing whitish along costa, purplish on inner area; dark olivaceous brown at base; inner band of the same color, broad, oblique and half crossing wing; discal dots small, a brown mark on costa opposite; a brown shade from apex, running in to end of cell; outer line pale, edged with dark on both sides, the vein lined; terminal dots small. Hind wing gray, translucent between the veins, dark on the margin. Expanse, 14 mm.

Type, female, No. 21985, U. S. Nat. Mus.; Cayuga, Guatemala, June (Schaus & Barnes).

Also a female from the same place and one from Cordoba, Mexico, August, 1908 (F. Knab).

✓ *Eurythmia santiagella*, new species.

Fore wing dark gray, the basal area lighter; inner line pale, straight, rather broad; discal dots black, connected by a slender line; outer line pale, minutely wavy, preceded by indistinct black dots; terminal dots obsolete. Hind wing whitish translucent, veins, costa and terminal line gray. Expanse, 14 mm.

Type, female, No. 21986, U. S. Nat. Mus.; Santiago, Cuba, February, 1902 (W. Schaus).

✓ *Homoeosoma cubella*, new species.

Fore wing reddish gray, whitish along costa; a narrow black line along vein 1 and median vein; inner line represented by one or two black dots; discal dots black; outer line obsolete, indicated by a dark shade on costa. Hind wing translucent gray, veins and termen darker. Expanse, 15.5 mm.

Type, female, No. 21987, U. S. Nat. Mus.; Baracoa, Cuba, March, 1902 (W. Schaus).

This may be the same as *H. musiosum* Dyar from Panama; but I keep them separate at present largely on the locality.

Plodia dolorosa, new species.

Fore wing uniform dark purple brown, the veins black-lined, but not contrasted; terminal line blackish. Hind wing dark gray, translucent between the veins. Expanse, 17 mm.

Type, female, No. 21988, U. S. Nat. Mus.; Cayuga, Guatemala, September (Schaus & Barnes).

Also six males and four females from the same place.

In abraded specimens, the veins become contrasted and the interspaces translucent. Costal fold and tuft on under side of fore wing of male reaching less than one-third the length of cell.

Poujadia chejelis, new species.

Costa whitish to middle of cell, irrorate with rosy scales; rest of wing rosy purple; a diffuse black shading along and beneath median vein, dividing on veins 2 and 5; an indistinct discal dot; fringe brownish. Hind wing pale yellowish gray, the costa and upper veins shaded with gray, a faint discal mark on the cross-vein. Expanse, 20 mm.

Type, male, No. 21989, U. S. Nat. Mus.; Chejel, Guatemala, August (Schaus & Barnes).

**OBSERVATION ON THE LIFE HISTORY OF AEDES
BIMACULATUS COQ.**

(*Diptera, Culicidæ*)

By HARVEY P. BARRET

As little is known and almost nothing has been written on the life history of *Aedes bimaculatus* the following observations may be of interest. The writer has had under observation for the past several years a "sink hole" in a thicket at the edge of the city of Charlotte, North Carolina. This hole is about 200 yards from the nearest dwelling and except for a few scattered houses is really in the country. During a rainy season and nearly always after a heavy rain there is a foot or more of water there. In fact there is usually some water there